

SEQUENCE LISTING

<110> Descamps, Valerie

Klarszinsky, Olivier

Barbeyron, Tristan

Cloarec, Bernard

Fritig, Bernard

Joubert, Jean-Marie

Plesse, Bertrand

Yvin, Jean-Claude

<120> Endofucanases and Method Using Same for Preparing Fuco-oligosaccharides from Fucanes, Bacterium Producing Endofucanases and Uses of Fuco-oligosaccharides for Plant Protection

<130> 32976-256844

<140> US 09/787,714

<141> 2001-03-21

<150> PCT/FR99/02243

<151> 1999-09-21

<160> 6

<170> PatentIn version 3.0

<210> 1

<211> 1474

<212> DNA

<213> Unknown

<220>

<223> Gram-negative rod bacterium

<220>

<221> Unsure

<222> (112)..(112)

<223> "n" = a or g or c or t/u, unknown, or other

<220>

<221> Unsure

<222> (1124)..(1124)

<223> "n" = a or g or c or t/u, unknown, or other

<400> 1

```

agagtttgat cntggctcag gatgaacgct agcggcaggc ctaacacatg caagtcgagg      60
ggtagagaga gcttgctttt cttgagaccg gcgcacgggt gcgtaacgcg tatacaatct      120
gcctcttact gcgggatagc ccagagaaat ttggattaat atcgcatagc ataacgaccc      180
cgcatgggat gttattaaag gttacggtaa gagatgagta tgcgttctat tagctagatg      240
gagtggtaac ggcacaccat ggcaacgata gatagggggc ctgagagggg gatccccac      300
actggtactg agacacggac cagactccta cgggaggcag cagtgaggaa tattggacaa      360
tggaggcaac tctgatccag ccatgccgcg tgcaggaaga cggccctatg ggttgtaaac      420
tgcttttata cgggaagaaa caccgctacg tgtagccttt gacggtaccg taagaataag      480
gatcggctaa ctccgtgcca gcagccgcg taatacggag gatccaagcg ttatccggaa      540
tcattgggtt taaaggggcc gtagtgatg attaagtcag aggtgaaatc ctgccgctca      600
acggtagaat tgcctttgat actggttatc ttgaatcaat gtgaagtggg tagaatatgt      660
agtgtagcgg tgaaatgcat agatattaca tagaatacca attgcgaagg cagatcacta      720
acattgtatt gacactgatg gacgaaagcg tggggagcga acaggattag ataccctgg      780
agtccacgcc gtaaacgatg gatactagct gttcggatct atctgagtgg ctaagcgaaa      840
gtgataagta tcccacctgg ggagtacgtt cgcaagaatg aaactcaaag gaattgacgg      900

```

```

gggccccgcac aagcgggtgga gcatgtgggt taattcgatg atacgcgagg aaccttacca 960
gggctttaa at gtagattgca ttaggtggag acacttattt cttcggacca tctacaaggt 1020
gctgcatggg tgctgctcagc tcgtgccgtg aggtgtcagg ttaagtccta taacgagcgc 1080
aacccccgtt gttagttgcc agcgagtcac gtcgggaact ctancaagac tgccagtgc 1140
aactgtgagg aaggtgggga tgacgtcaaa tcatcacggc ccttacgtcc tgggctacac 1200
acgtgctaca atggtaggga cagagagcag ccactgggag accaggagcg aatctataaa 1260
ccctatcaca gttcggatcg gagtctgcaa ctcgactccg tgaagctgga atcgctagta 1320
atcgcatatc agccatgatg cgggtgaatac gttcccgggc cttgtacaca ccgcccgtca 1380
agccatggaa gctgggagtg cctgaagtcc gtcaccgcaa ggagcggcct agggtaaaat 1440
cggtaactag ggctaagtcg taacaagggtg tccg 1474

```

<210> 2

<211> 15

<212> PRT

<213> Unknown

<220>

<223> Gram-negative rod bacterium

<400> 2

```

Gln Thr Ala Asn Thr Thr Tyr Gly Ile Asn Thr Val Ala Ser Met
1           5           10           15

```

<210> 3

<211> 18

<212> PRT

<213> Unknown

<220>

<223> Gram-negative rod bacterium

<400> 3

```

Thr Ser Gly Pro Asp Trp Leu Thr Ile Gln Gln Thr Asp Ala Asn Ser
1           5           10           15

```

Gly Lys

<210> 4

<211> 17

<212> PRT

<213> Unknown

<220>

<223> Gram-negative rod bacterium

<400> 4

Ile Thr Val Asp His Val Ala Gly Phe Thr Asn Leu Trp Asn Gly Ala
1 5 10 15

Pro

<210> 5

<211> 203

<212> DNA

<213> Unknown

<220>

<223> Gram-negative rod bacterium

<400> 5

attacggttg atcatgttgc aggttttact aatttgggta atggagcacc tgtttggtct 60

tcacctatac ttaatcttac cgatggaaaa ggatcattcg cctataatta tactttgcaa 120

ttaggaaccg attattatga ttttgaaggt gatgcactta ctattactaa aacatcagga 180

cctgattggc tcaccattca aca 203

<210> 6

<211> 67

<212> PRT

<213> Unknown

<220>

<223> Gram-negative rod bacterium

<400> 6

Ile Thr Val Asp His Val Ala Gly Phe Thr Asn Leu Gly Asn Gly Ala
1 5 10 15

Pro Val Trp Ser Ser Pro Ile Leu Asn Leu Thr Asp Gly Lys Gly Ser
20 25 30

Phe Ala Tyr Asn Tyr Thr Leu Gln Leu Gly Thr Asp Tyr Tyr Asp Phe
35 40 45

Glu Gly Asp Ala Leu Thr Ile Thr Lys Thr Ser Gly Pro Asp Trp Leu
50 55 60

Thr Ile Gln
65